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ABSTRACT

This booklet compiles information on 16 screening instruments for young children. For each instrument, the following information is provided: (1) name; (2) publisher; (3) year published; (4) cost of kit; (5) cost per child/cost of forms; (6) age range; (7) domains tested (including cognitive, expressive language, receptive language, articulation, gross motor, fine motor, psychosocial, self-help, adaptive, other); (8) standardization; (9) validity; (10) reliability; (11) sensitivity; (12) specificity; (13) time to administer; (14) who can administer; (15) role of family; (16) items passed by; (17) item scoring; (18) results; (19) adaptation of special needs; (20) sensitivity to other cultures; (21) materials and ease of use; (22) training; and (23) comments. The screening instruments described are: (1) Battelle Developmental Inventory Screening Test; (2) Birth to Three Assessment and Intervention System; (3) Comprehensive Identification Process; (4) The Denver II; (5) DIAL-R (Developmental Indicators for the Assessment of Learning-Revised); (6) Diagnostic Inventory for Children, Preschool Screen 3.0; (7) Diagnostic Inventory for Screening Children, Third Edition; (8) Early Child Development Inventory; (9) Early Screening Inventory; (10) Early Screening Profile; (11) FirstSTEP (Screening Test for Evaluating Preschoolers); (12) ICMQ (Infant/Child Monitoring Questionnaires); (13) Kent Infant Development Scale; (14) Miller Assessment for Preschoolers; (15) Minnesota Child Development Inventory; (16) Preschool Development Inventory. (EV)

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SCREENING INSTRUMENTS:

Review of Instruments for Screening Children Ages Birth to Five Years

January 1993
Updated November 1995

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Screening Instruments:

Review of Instruments for Screening Children Ages Birth to Five Years

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January 1993
Updated November 1995

Screening Instruments

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INSTRUMENT		**BATTELLE DEVELOPMENTAL INVENTORY SCREENING TEST**
PUBLISHER		DLM Teaching Resources, One DLM Park, Allen, TX 75002
YEAR PUBLISHED		1984
COST OF KIT		$225
COST PER CHILD/COST OF FORMS		$22/30 forms
AGE RANGE		Birth to Eight
DOMAINS	COGNITIVE	X
	EXP. LANG.	X
	RECPT. LANG.	X
	ARTIC.	
	GROSS MOT.	X
	FINE MOT.	X
	PSYCHOSOC.	X
	SELF-HELP	
	ADAPTIVE	X
	OTHER	
STANDARDIZATION		Standardization on 800 children reflecting U.S. population by age, sex, race, and geographical region (75% urban and 25% rural).
VALIDITY		Created by "experts" in the field. High concurrent validity of full BDI with other accepted measures (Vineland, Bayley, PPVT-R, Minnesota).
RELIABILITY		Test-retest: Full BDI .71 - .99, Most were 80+. Procedural and Scoring Reliability: .70 - 1.00, Most were 80+.

SENSITIVITY	High correlation with the total battery r>.90.
SPECIFICITY	May overrefer compared to Denver Developmental Screening Test.
TIME TO ADMINISTER	10 - 30 minutes
WHO CAN ADMINISTER	Professionals and trained paraprofessionals.
ROLE OF FAMILY	Certain items can be passed by interview with the parent.
ITEMS PASSED BY	Structured activities, observation, and parent interview.
ITEM SCORING	The criteria for scoring a child's performance is presented with each item, using the following three-point system. 2 points = The child responds according to the specified criterion. 1 point = The child attempts an item but cannot meet the specified criterion. 0 points = The child cannot or will not attempt an item or the response is an extremely poor approximation of the desired behavior.
RESULTS	Cutoff scores, age equivalents, and standard deviations.
ADAPTATION OF SPECIAL NEEDS	Yes. Specific instructions are given for children with: Motor Impairment, Hearing Impairment, Emotional Disability, Visual Impairment.
SENSITIVITY TO OTHER CULTURES	Normed on census population: 84% white, 16% minority. No special instructions or norms for minority children.
MATERIALS AND EASE OF USE	The three point scoring system provides a sensitive measure that takes into account emerging as well as fully developed skills, but may make it more difficult to score. There is a separate booklet for the examiner to use when assessing each domain.
TRAINING	There is a video that accompanies the instrument, however, it explains the domains covered and does not train testers how to give the test.
COMMENTS	The Battelle includes a diagnostic evaluation. It is not recommended for children 6 months and under. The screening test provides very few items at each age level compared to other screening measures.

INSTRUMENT		**BIRTH TO THREE ASSESSMENT AND INTERVENTION SYSTEM**
PUBLISHER		D.L.M., P. O. Box 4000, One DLM Park, Allen, TX 75002, 800-527-4747
YEAR PUBLISHED		1979, standardized 1984.
COST OF KIT		$145.00 whole kit, $60.00 screening test
COST PER CHILD/COST OF FORMS		$4/child
AGE RANGE		Birth to Three
DOMAINS	COGNITIVE	
	EXP. LANG.	X
	RECPT. LANG.	X
	ARTIC.	
	GROSS MOT.	X
	FINE MOT.	X
	PSYCHOSOC.	X
	SELF-HELP	X
	ADAPTIVE	
	OTHER	Avenues to Learning
STANDARDIZATION		357 children stratified by age, sex, rural and urban, SES
VALIDITY		No info. available.
RELIABILITY		Inter-rater = .88 to .99.

SENSITIVITY	No info. available.
SPECIFICITY	No info. available.
TIME TO ADMINISTER	No info. available.
WHO CAN ADMINISTER	Anyone w/evaluation experience.
ROLE OF FAMILY	Present during evaluation. Give some input to item administration.
ITEMS PASSED BY	Usually more than 1 trial observation only, but some parent input to administration of items.
ITEM SCORING	Pass/Emerging/Fail
RESULTS	Percentiles, standard scores.
ADAPTATION OF SPECIAL NEEDS	No info. available.
SENSITIVITY TO OTHER CULTURES	No info. available.
MATERIALS AND EASE OF USE	Have to collect your own materjals and a lot are needed for this test. Instructions are to use materials relevant to child - does this affect standardization?
TRAINING	No info. available.
COMMENTS	Includes a criterion-referenced assessment and a curriculum w/lesson plans + 180 activities for home program. Total of 85 items. Some items are to be observed over 1 week or 1 day's time - impractical for screening. Developed primarily out of a speech/language curriculum.

INSTRUMENT		**COMPREHENSIVE IDENTIFICATION PROCESS**
PUBLISHER		Scholastic Testing Service, 480 Meyer Road, Bensenville, IL 60106-8056, 800-642-6STS
YEAR PUBLISHED		1975
COST OF KIT		$121.95
COST PER CHILD/COST OF FORMS		$1.70/child
AGE RANGE		2.5 to 5.5
DOMAINS	COGNITIVE	X
	EXP. LANG.	X
	RECPT. LANG.	X
	ARTIC.	X
	GROSS MOT.	X
	FINE MOT.	X
	PSYCHOSOC.	X
	SELF-HELP	
	ADAPTIVE	
	OTHER	Hearing, vision, medical history
STANDARDIZATION		Item selection based on 3 samples of 762, 273 and 416. Final form tested on 142 children, all Caucasian, from small Midwest communities or rural, upper-lower and lower middle class. 10 studies total, 3 were multi-cultural, multi-racial or low SES. To be restandardized in 1992.
VALIDITY		Scale is designed to identify lower 15% of children. Factor analysis showed unclear factor structure, not related to the subscales. Predictive: Of 790 children screened at age 3 and followed up at age 5 to 6: About 37 of CIP positives no longer need program. 8 CIP negatives had been given speech programming only.
RELIABILITY		Only inter-rater reliability data is reported = 94 - 95% agreement.

SENSITIVITY	False negatives are probably low.
SPECIFICITY	False positives may be higher. May also identify borderline children who may not be eligible for special programs.
TIME TO ADMINISTER	15 - 40 minutes
WHO CAN ADMINISTER	Paraprofessionals but must be interpreted by a professional.
ROLE OF FAMILY	Parent interview form, some items passed by parent report.
ITEMS PASSED BY	Observation. Some parent report.
ITEM SCORING	Pass/Fail
RESULTS	Pass/Refer or Rescreen/Evaluate
ADAPTATION OF SPECIAL NEEDS	Manual has a section about home screenings, uncooperative children, and rural areas, but not about adaptations for handicapped children.
SENSITIVITY TO OTHER CULTURES	Spanish version available. Assessment of nonstandard dialects is discussed. One study evaluated racial bias and found little evidence of bias.
MATERIALS AND EASE OF USE	Positive reports from those who have used it.
TRAINING	Training film strip is available for $32.95.
COMMENTS	Norms are rather old. Teams who use it really feel it works despite lack of hard data about reliability and validity. Since it is designed to refer bottom 15% of children, may over-refer considering that only 5% of children 3-5 are expected to be eligible for preschool programs.

INSTRUMENT		**THE DENVER II**
PUBLISHER		Denver Developmental Materials, Inc., P. O. Box 6919, Denver, CO 80206-0919, (303) 355-4729
YEAR PUBLISHED		1989
COST OF KIT		Complete package of forms, manual, and kit items: $53, Manual: $15, Technical Manual: $19.
COST PER CHILD/COST OF FORMS		$14/100 forms
AGE RANGE		Birth to Six
DOMAINS	COGNITIVE	
	EXP. LANG.	X Exp. lang. and recpt. lang. are combined
	RECPT. LANG.	X
	ARTIC.	A separate screening test can be purchased
	GROSS MOT.	X
	FINE MOT.	X Fine motor and adaptive are combined
	PSYCHOSOC.	X
	SELF-HELP	Many of the items in the personal/social subscale are self-help items
	ADAPTIVE	X Fine motor and adaptive are combined
	OTHER	X Behavior Rating Scale
STANDARDIZATION		1) Denver County (N=1039) 2) Colorado non-Denver (N=1057) Gender: Girls (N=1057) Boys (N=1031) Denver County was divided into three ethnic groups: Anglo, Black, and Hispanic. The Colorado non-Denver group was subdivided into three residence categories: Urban area: minimum population 50,000, Semi-rural area: population of 2,500 or more inhabitants, Rural area: all places not meeting the criteria for designation as either urban or semi-rural. Independent variables controlled for in the Denver County sample were age of child, years of maternal education, and maternal ethnicity.
VALIDITY		The majority of items are from the DDST. A committee including the authors, a consultant from the Colo. Dept. of Health, and a speech pathologist decided to eliminate two items, revise 21, and retain the rest. A rationale for these changes are presented in the Technical Manual. Item reliability studies were completed and then a final selection of items was made. A new age scale (one that coincides with the Academy of Pediatrics' recommended periodicity schedule for health maintenance visits) was adopted for the Denver II form.
RELIABILITY		On a 7-10 test-retest stability check with the same examiner and the same observer of the 149 items administered: 54 had 100% agreement 32 had between 90% and 99.9% 39 had between 80% and 89.9%

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RELIABILITY (cont.)	23 had between 50% and 79.9% 1 had a mean below 50% Inter-rater (Procedural and Scoring Reliability): In the reliability study 141 of the 149 items had 100% agreement.
SENSITIVITY	Tests have not been completed.
SPECIFICITY	Tests have not been completed.
TIME TO ADMINISTER	20 minutes
WHO CAN ADMINISTER	Professionals or trained paraprofessionals.
ROLE OF FAMILY	Certain questions can be passed by interview with parent.
ITEMS PASSED BY	Report, observation, administration.
ITEM SCORING	Pass, fail, no opportunity, refused.
RESULTS	Normal, Abnormal, Questionable, Untestable.
ADAPTATION OF SPECIAL NEEDS	No
SENSITIVITY TO OTHER CULTURES	The Denver II was normed on Black, Hispanic, and Caucasian groups. Appendix R of the Technical Manual provides a test form with items asterisked that have clinically significantly different subgroup norms.
MATERIALS AND EASE OF USE	A kit and a manual can be purchased. These are relatively inexpensive compared with other screening tools. Fairly easy to learn. Age scale is based on the American Academy of Pediatrics' recommended health maintenance visits.
TRAINING	A technical manual including details of the revision and standardization, tables of data, a chapter on training, student proficiency test (to be copied) with answers for the instructor are included. A training videotape of 35 minutes is available for purchase ($200) or rental ($90).
COMMENTS	There are more language items than the DDST (old version of the Denver II) and fewer items than can be passed by report. The format and the number of items lends itself well to sharing information about children's development with parents. This is now one of the best standardized screening instruments available. 12

INSTRUMENT		**DIAL-R (DEVELOPMENTAL INDICATORS FOR THE ASSESSMENT OF LEARNING-REVISED)**
PUBLISHER		American Guidance Service, P. O. Box 99, Circle Pines, MN 55014-1796 800-247-5053
YEAR PUBLISHED		Standardized 1981, renormed 1990
COST OF KIT		$199.00
COST PER CHILD/COST OF FORMS		$25.00/50 forms
AGE RANGE		2.0 to 5.11
DOMAINS	COGNITIVE	
	EXP. LANG.	X Exp. and Recpt. are combined
	RECPT. LANG.	X
	ARTIC.	
	GROSS MOT.	X
	FINE MOT.	X
	PSYCHOSOC.	
	SELF-HELP	
	ADAPTIVE	
	OTHER	Concepts Social/emotional/behavior checklist with each domain
STANDARDIZATION		The DIAL-R was standardized from 1981 - 1983. Eight sites were selected on the basis of geographic location and size of community (over and under 50,000). Each site was requested to test 320 children stratified by age and sex, for a total planned sample of 2,560 children. Rather than stratify the sample according to the racial classifications or proportions given in the U.S. Census it was decided to test approximately equal numbers of Caucasian and minority children, making possible the creation of separate norms for these two groups by age levels. A total of 2,447 children were actually tested. There was a 1990 reanalysis of the standardization data. When the norms were reanalyzed in 1990, a Census sample was created by using a statistical weighting procedure to adjust the proportion of minorities to match the latest available U.S. Census data (69.4% Caucasian and 30.6% minority. Norms were also developed separately for the Caucasian sample and the Minority sample.
VALIDITY		Content: Items for school success were identified by a team of eight child development experts. Construct: Each DIAL-R task had to demonstrate a consistent developmental growth pattern across the age groupings of the DIAL-R in order to be included in the final 24 items.

VALIDITY (cont.)	Concurrent: none reported Predictive: none reported
RELIABILITY	Test-retest: 64 children were retested m=35 days: .87 Procedural and scoring: 81 to 99% (completed with DIAL)
SENSITIVITY	None reported
SPECIFICITY	None reported
TIME TO ADMINISTER	20 - 30 minutes
WHO CAN ADMINISTER	Trained "operators" and a professional coordinator. Children move to a different "operator" for each domain assessed.
ROLE OF FAMILY	Parent fills out a parent information form. There are parent cards and activity cards to give parents. The child is expected to separate from the parent because the child moves through stations set up throughout the room. Parent may accompany the child if the child needs the parent.
ITEMS PASSED BY	Administration of each item.
ITEM SCORING	The child receives a score for each item.
RESULTS	Potential problem, OK, potential advanced.
ADAPTATION OF SPECIAL NEEDS	NO
SENSITIVITY TO OTHER CULTURES	There are three normed samples given: Census, Caucasian, minority.
MATERIALS AND EASE OF USE	The assessment was standardized using three "Operators", operating three stations set up in a large room. The child moves from station to station to complete each profile. The child is expected to leave the parent. Dials are used for each profile to motivate children.
TRAINING	A training video and a packet of materials are available.
COMMENTS	It is not best practice to have young children move from station to station. This requires them to interact with several strangers. Also it is best practice to have the parent present to answer questions and to relate whether the behavior is typical. 14

INSTRUMENT		**DIAGNOSTIC INVENTORY FOR CHILDREN, PRESCHOOL SCREEN 3.0**
PUBLISHER		Marian Mainland Child & Family Centre, Kitchener Waterloo Hospital, 835 King St. West, Kitchener, Ontario N2G1G3, (519) 742-3611
YEAR PUBLISHED		1990
COST OF KIT		No info. available.
COST PER CHILD/COST OF FORMS		No info. available.
AGE RANGE		5 mo. to 60 mo.
DOMAINS	COGNITIVE	No subscales
	EXP. LANG.	
	RECPT. LANG.	
	ARTIC.	
	GROSS MOT.	
	FINE MOT.	
	PSYCHOSOC.	
	SELF-HELP	
	ADAPTIVE	
	OTHER	
STANDARDIZATION		560 From DISC standardization, a non-stratified sample of 326 w/very skewed ages, very few children less than 39 months. Test is probably too easy for children > 52 mos.
VALIDITY		Showed expected relationships with history variables and other info. from parent and teacher questionnaires.
RELIABILITY		Split-half = .77.

SENSITIVITY	.62 refers 7 to 11% of those tested.
SPECIFICITY	.87
TIME TO ADMINISTER	10- 20 minutes
WHO CAN ADMINISTER	Paraprofessionals
ROLE OF FAMILY	Some report by families accepted.
ITEMS PASSED BY	Usually observation but some items by report.
ITEM SCORING	Yes/No/Refuse
RESULTS	6 or less = refer for eval. 7 = questionable. 8 or more = OK.
ADAPTATION OF SPECIAL NEEDS	NO for screening in mass community format.
SENSITIVITY TO OTHER CULTURES	Not done.
MATERIALS AND EASE OF USE	Small kit. 12 items/child are administered.
TRAINING	Videotape being done.
COMMENTS	Still not enough good information on reliability and validity. Needs to be normed on a larger sample with more complete representation across ages. Normed on Caucasian middle class Canadians - no information on cultural issues. Refers about 10% for evaluation. No information on positive predictive value, false positives or false negatives.

INSTRUMENT		**DIAGNOSTIC INVENTORY FOR SCREENING CHILDREN, 3RD EDITION**
PUBLISHER		Marian Mainland Child and Family Centre, Kitchener-Waterloo Hosp., 835 King St. West, Kitchener, Ontario NG21G3, (519) 742-3611
YEAR PUBLISHED		1990
COST OF KIT		$575.00
COST PER CHILD/COST OF FORMS		$4/child
AGE RANGE		Birth to Five yrs. (but not 5 yr. olds)
DOMAINS	COGNITIVE	(see other)
	EXP. LANG.	X
	RECPT. LANG.	X
	ARTIC.	
	GROSS MOT.	X
	FINE MOT.	X
	PSYCHOSOC.	X
	SELF-HELP	X
	ADAPTIVE	
	OTHER	Auditory attention and memory, Visual attention and memory
STANDARDIZATION		Normed and standardized on separate samples. Standardized on 400 children, normals, no delays, English speaking. Normed on 573 children, 0-60 mos., stratified on Canadian English speaking pop., age, sex, urban/rural, all white, occupation, single/double parents.
VALIDITY		Concurrent: correlations of DISC scales with Stanford-Binet L-M were .64 - .78. Predictive validity studies are in process but not complete.
RELIABILITY		Inter-rater: high correlations on a very small study. Test-retest: Receptive and expressive language and fine motor scale were significantly different from time 1 to time 2 but small differences in actual points. Test-retest coefficient was .94. Split-half correlation was .98 to .99.

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SENSITIVITY	
SPECIFICITY	
TIME TO ADMINISTER	15 - 40 minutes
WHO CAN ADMINISTER	Must be trained in DISC workshop. Minimal requirement is 2 year diploma or E.C.E. Child Devel. and DISC certification.
ROLE OF FAMILY	Present during assessment but no participation. Parent may hold infant on lap.
ITEMS PASSED BY	Some items can be passed by parent report.
ITEM SCORING	Pass/Fail/Refusal or No Opportunity
RESULTS	A profile of scores in 8 areas. Results can be be percentiles, age equivalents categories: average or possible delay or probable delay.
ADAPTATION OF SPECIAL NEEDS	Adaptation made for special needs children. Norms being developed for phys. handicapped children.
SENSITIVITY TO OTHER CULTURES	Translated into French and re-standardized. Being normed for Native Americans in Canada.
MATERIALS AND EASE OF USE	An enormous bag full of lots of materials. You will also need a stairs and food for a feeding assessment. Can return to refused items.
TRAINING	Tapes, workshops and 3 levels of certification available.
COMMENTS	A 34 page record booklet for each child! Lots and lots of equipment! Very conscientiously developed. Careful attention to psychometric theory in constructing this inventory. But small samples for norms and for studies of its use.

INSTRUMENT		**EARLY CHILD DEVELOPMENT INVENTORY**
PUBLISHER		Behavior Science Systems, Box 1108, Minneapolis, MN 55458 (612) 929-6220
YEAR PUBLISHED		1988
COST OF KIT		$5.00/manual
COST PER CHILD/COST OF FORMS		$.28/child
AGE RANGE		15 mo. - 3 yrs.
DOMAINS	COGNITIVE	
	EXP. LANG.	
	RECPT. LANG.	
	ARTIC.	
	GROSS MOT.	
	FINE MOT.	
	PSYCHOSOC.	
	SELF-HELP	
	ADAPTIVE	
	OTHER	General Development, Possible Problems
STANDARDIZATION		An abbreviated form of the General Devel. Scale from the MCDI.
VALIDITY		
RELIABILITY		

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SENSITIVITY	
SPECIFICITY	
TIME TO ADMINISTER	10 - 20 minutes
WHO CAN ADMINISTER	Self administered by parent.
ROLE OF FAMILY	Parent information.
ITEMS PASSED BY	Parent report.
ITEM SCORING	Yes/No
RESULTS	Within or below age expectations. Below = 20% below for child's age.
ADAPTATION OF SPECIAL NEEDS	None
SENSITIVITY TO OTHER CULTURES	No information given.
MATERIALS AND EASE OF USE	Very easy to use.
TRAINING	None required.
COMMENTS	Answer sheet (questions are on it). All on 1 page. 84 questions. First stage screen, very brief and easy to use. Can be done at home and results mailed in.

INSTRUMENT		**EARLY SCREENING INVENTORY**
PUBLISHER		Teachers College Press, Columbia University, 1234 Amsterdam Ave., New York, NY 10027, 800-445-6638
YEAR PUBLISHED		1983
COST OF KIT		
COST PER CHILD/COST OF FORMS		
AGE RANGE		Four to six years of age
DOMAINS	COGNITIVE	X
	EXP. LANG.	X
	RECPT. LANG.	X
	ARTIC.	
	GROSS MOT.	X
	FINE MOT.	visual-motor
	PSYCHOSOC.	
	SELF-HELP	
	ADAPTIVE	X
	OTHER	body awareness
STANDARDIZATION		Normed on Caucasian population (low to moderately low income).
VALIDITY		The items were either developed by the authors or selected and adapted from well-known diagnostic and screening instruments. Concurrent Validity: With McCarthy Scales: .73. Predictive Validity: With Metropolitan Reading Test at the end of Kindergarten year: .45. ESI scores were obtained prior to or in the first two months of the kindergarten year.
RELIABILITY		Test-retest: Two examiners administered the ESI to the same subject on two occasions, approximately one week apart. The percent agreement for the total score on the ESI test-retest administration was .82. Inter-rater (Procedural and Scoring reliability): The tester and observer scored the same performance, rendering two sets of scores for each test performance. The total score correlation was .91.

SENSITIVITY	Determined in this case by analyzing the cumulative score (derived from report-card grades in reading, math, and spelling) in K, 1st, 2nd, 3rd, and 4th grades. Sensitivity was .88 in K and .50 for grade 4.
SPECIFICITY	Determined in same way as sensitivity. Specificity was .90 in K and .74 in grade 4.
TIME TO ADMINISTER	15 - 20 minutes
WHO CAN ADMINISTER	Professionals and trained paraprofessionals.
ROLE OF FAMILY	A parent questionnaire (history) is available. Parents fill out information concerning the child's medical history, school history, basic information about the family, family history of birth defects and illnesses, the child's health, and the child's development. Items on the test cannot be passed by interviewing the parent.
ITEMS PASSED BY	Administering all items to the child.
ITEM SCORING	Pass, fail, refuse. Points are then given for each pass.
RESULTS	OK, rescreen, refer. This is based on the total score. OK: total score higher than one standard deviation below the mean. Rescreen: total score between one and two standard deviations below the mean. Refer: total score lower than two standard deviations below the mean.
ADAPTATION OF SPECIAL NEEDS	NO
SENSITIVITY TO OTHER CULTURES	There is a Spanish version.
MATERIALS AND EASE OF USE	Items must be administered in order. Most other screening tools allow the person administering the instrument to vary the order of the items according to the child's interests, strengths, and needs.
TRAINING	A training video tape that includes a demonstration of the ESI and a discussion and interpretation of results is available from Michigan Media, The University of Michigan, Ann Arbor, MI 48109.
COMMENTS	Very brief. Items are not listed in developmental order and thus the instrument does not lend itself to helping parents understand development.

INSTRUMENT		**EARLY SCREENING PROFILE**
PUBLISHER		American Guidance Service, 4201 Woodland Road, P.O. Box 99, Circle Pines, MN 55014-1796, 800-247-5053
YEAR PUBLISHED		1990
COST OF KIT		$199
COST PER CHILD/COST OF FORMS		Pkgs of 25: Test Record: $19, Self Help/Social: $12, Home/Health History: $12, Score Summary: $7
AGE RANGE		Two through six
DOMAINS	COGNITIVE	X
	EXP. LANG.	X
	RECPT. LANG.	X
	ARTIC.	X
	GROSS MOT.	X
	FINE MOT.	X
	PSYCHOSOC.	X
	SELF-HELP	X
	ADAPTIVE	X
	OTHER	Behavior surveys (filled out after profiles are completed) Home (home environment) (completed by parent) Health History (completed by parent)
STANDARDIZATION		Normed on 1,149 children based on 1990 census for gender, race, ethnic group, region of the country, and parents' level of education. The standardization program was conducted between Oct. 1987 and Dec. 1988 in 26 states and the District of Columbia.
VALIDITY		Content: The Cognitive/Language Profile was based on two major criteria: (1) the Profile should include measures of language, preacademic skills, reversals, and seriation, all of which are shown to be consistently good predictors of later academic achievement, and (2) the Profile should include nonverbal measures of potential for children who may perform poorly on language and culture-based tests. The Motor Profile was based on an extensive analysis of research investigating young children's motor development and research conducted during the development and standardization of the Bruininks-Oseretsky Test of Motor Proficiency. For the Self-Help Profile items were chosen that: (1) represented major everyday activities of young children in areas of communications, daily living skills, socialization, and motor skills, (2) items were written so that they could be easily understood by and objectively scored, by parents and teachers, and (3) items needed to apply to children in the age range of the battery.

VALIDITY (cont.)	For the home survey items were chosen that have been shown to be related to children's development. For the health history survey met the following criteria: (1) provide a record of immunizations and childhood illnesses, (2) identify previously diagnosed health problems and physical conditions that may affect performance in the screening or in an education program, (3) identify health problems (allergies, etc.), and (4) assist in determining the need for referral to a medical professional. For the behavior survey items were chosen to measure behaviors of young children in structured testing situations that may affect their performance on the tests and items were chosen that may be predictive of their behavior in education and other settings. Construct: Extensive studies have been completed. Concurrent: The total screening based on three profiles: With Stanford-Binet standard scores: .68 With PPVT-R standard scores: .65 Extensive studies have been completed comparing the total screening score and each profile separately with many other measures. Predictive: The Screening Profiles was followed several months to a year later by the administration of other relevant measures. Studies support that the Screening is a good predictor of later scores on cognitive measures and of later academic performance.
RELIABILITY	Test-retest: The entire battery, excluding the Self-Help/Social Profile was administered twice to two groups of subjects. Immediate test-retest (N=74) = .79 Delayed test-retest (22-75 days) (N=42) = .80 Scoring--procedural: Interrater, or scorer, reliability was conducted for the Motor profile. Correlations ranged from .83 to .98
SENSITIVITY	Not stated
SPECIFICITY	Not stated
TIME TO ADMINISTER	15 - 40 minutes
WHO CAN ADMINISTER	Professionals and trained paraprofessionals.
ROLE OF FAMILY	Parents complete the home and health history surveys and part of self-help and social survey.
ITEMS PASSED BY	Administering the items.
ITEM SCORING	Always or almost always = 2 points Sometimes or partially = 1 point Never or almost never = 0 point

RESULTS	Level I: Screening index (below average, average, above average) Level II: Standard scores Can obtain results for the three profiles separately or for the total . The total score can be based on two profiles.
ADAPTATION OF SPECIAL NEEDS	NO
SENSITIVITY TO OTHER CULTURES	Normed on the 1990 census for race, gender, and ethnic group.
MATERIALS AND EASE OF USE	An attractive, easy to carry kit is provided. There is a separate booklet to use for the different subtests, which may make giving the instrument more difficult than ones where everything is contained in one administration manual.
TRAINING	No specific training materials are provided.
COMMENTS	This instrument is so new that not very many groups have used it.

BEST COPY AVAILABLE

INSTRUMENT		**FirstSTEP (SCREENING TEST FOR EVALUATING PRESCHOOLERS) (Miller, L. J.)**
PUBLISHER		Psychological Corp. Order Service, P. O. Box 839954, San Antonio, TX 78283-3954, 800-228-0752
YEAR PUBLISHED		1992
COST OF KIT		$148.50
COST PER CHILD/COST OF FORMS		$23.00 for a packet of 25 forms
AGE RANGE		2 years, 9 months to 6 years, 2 months
DOMAINS	COGNITIVE	X
	EXP. LANG.	X
	RECPT. LANG.	X
	ARTIC.	
	GROSS MOT.	X
	FINE MOT.	X
	PSYCHOSOC.	X
	SELF-HELP	X
	ADAPTIVE	X
	OTHER	
STANDARDIZATION		1400, stratified, national norms by region, age, ethnicity, gender, community size, parent's education.
CONTENT VALIDITY		Extensive review by numerous subject matter expects with detailed Table of Specifications in manual.
CONCURRENT VALIDITY		Provides evidence of convergent and discriminate validity Correlation with WPPSI = .82 Correlation with TOLD-2 = .57 to .75 Correlation with Bruininks .63 Correlation with MAP .71 and classification agreement is 82%
CONSTRUCT VALIDITY		Data collected from 4 groups of children with documented delays.

Type of Delay	N	Performance of children with delays compared to Standardization Sample
Cognitive	130	-1.67 to 2.4 below mean
Communication	172	-1.67 to -2 below mean
Motor	147	-1.25 to -1.67 below mean
Social-Emotional	158	-1.33 to -1.75 below mean

RELIABILITY	Internal consistency: .88 to .91 depending on age Test-retest: Percent Agreement .85 to .93 depending on domain Composite: .90 Correlation coefficient .93 for composite Inter-rater: Classification consistency: .81 to 1.00 depending on domain Composite: .91 Correlation coefficient: .94 for composite
FACTOR ANALYSIS	Exploratory and confirmatory analysis demonstrated clear Motor, Language, and Cognitive Factors.
CLASSIFICATION ANALYSIS	Using double cross-validation design Sensitivity 72% to 85% depending on domain Specificity 76% to 82% depending on domain False negatives very low (1-3%) but false positives are higher (15-21%). However, examiners can set their own cut-points in accordance with the philosophy of their system if they wish to identify fewer false positives.
TIME TO ADMINISTER	Administered in approximately 15 minutes and scored in less than two minutes. Optional adaptive questionnaire can be administered to parents by interview. Also includes optional Parent or Teacher Behavior Questionnaire.
WHO CAN ADMINISTER	Anyone - child care teachers except language portion may be too difficult for paraprofessionals.
ROLE OF FAMILY	Observation and support. Optional parent input by using Adaptive and/or Behavior Questionnaire.
ITEMS PASSED BY	Observation only. No parent report.
RESULTS	Standard scores available in all domains and the Parent or Teacher Behavior Checklist.
ADAPTATION OF SPECIAL NEEDS	No information available.
SENSITIVITY TO OTHER CULTURES	Extensive item bias analysis. Spanish version - some items altered for Spanish culture.
MATERIALS AND EASE OF USE	Simple durable materials, a card, booklet and a few others. Easy to use.
TRAINING	Training tapes are available from the KID Foundation, 1901 West Littleton Blvd., Littleton, CO 80120-2058, (303) 794-1182.

INSTRUMENT		**INFANT/CHILD MONITORING QUESTIONNAIRES (ICMQ) (Bricker, D.)**
DESCRIPTION		The ICMQs are parent questionnaires which can be completed by parents or administered through interview with parents. They provide a developmental tracking system designed to follow a child's motor, language, adaptive and personal social development at 4 month intervals until 24 months, and at 6 month intervals until 36 months and a final questionnaire at 4 years.
PUBLISHER		University of Oregon, Clinical Services Building, 901 East 18th Street, Eugene, OR 97403
YEAR PUBLISHED		1991
COST OF KIT		$40 (includes ICMQ Procedures Manual)
COST PER CHILD/COST OF FORMS		$2.50/infant/questionnaire or $20 for all nine questionnaires
AGE RANGE		4 months to 4 years
DOMAINS	COGNITIVE	
	EXP. LANG.	X
	RECPT. LANG.	X
	ARTIC.	
	GROSS MOT.	X
	FINE MOT.	X
	PSYCHOSOC.	X
	SELF-HELP	
	ADAPTIVE	X
	OTHER	X
STANDARDIZATION		Sample of 1,779 normative and 3,610 at-risk children: Questionnaire N Questionnaire N 4 months 936 20 months 631 8 months 839 24 months 636 12 months 731 30 months 342 16 months 713 36 months 329 4 years 232 *Note: sample not stratified by U.S. Census statistics.
VALIDITY		Concurrent validity compared classifications of children with and without developmental disabilities with results of standardized assessment (Gesell, Bayley and Stanford-Binet). Percent agreement ranged from .79 for the 4 month questionnaire to .94 for the 16 month questionnaire.
RELIABILITY		Test-retest reliability was measured as the percent agreement between questionnaire completed by parents at 2-3 week intervals. Percent agreement ranged from .91 to .99. Inter-rater reliability was measured as the percent agreement between questionnaires completed by parents and a professional examiner. Percent agreement ranged from .87 to .97.

SENSITIVITY	
SPECIFICITY	
TIME TO ADMINISTER	10 to 15 minutes
WHO CAN ADMINISTER	Parents, paraprofessionals, professionals, physicians, social workers
ROLE OF FAMILY	Can be completed by parents or administered by trained personnel
ITEMS PASSED BY	Observing child for each item and recording response
ITEM SCORING	1 point for "yes" -- the child is doing the activity now .5 point for "sometimes" -- the child is just starting to do the activity 0 point for "not yet" -- the child has not started to do the activity yet Domain scores are compared with an empirically derived cutoff score to determine child's classification
RESULTS	Domain Score and classification for overall performance on the questionnaire
ADAPTATION OF SPECIAL NEEDS	None
SENSITIVITY TO OTHER CULTURES	Questionnaires are available in Spanish
MATERIALS AND EASE OF USE	Questionnaires are written at a 4-6 grade reading level. Scoring method takes about 5 minutes and is easy to use
TRAINING	The ICMQ Procedures Manual accompanies each order for the ICMQs and provides full details on implementing the ICMQ tracking system
COMMENTS	The ICMQs are a parent-completed developmental tracking system designed to follow a child's motor, language, adaptive, and personal social development from 4 months to 4 years. The questionnaires provide screening cut-off points at each age level. ICMQs are best used as a screening and/or tracking instrument to provide information about possible developmental delays and the need for referral for assessment.

INSTRUMENT		KENT INFANT DEVELOPMENT SCALE
PUBLISHER		Kent Developmental Metrics, 126 W. College Ave., P. O. Box 3178, Kent, OH 44240-3178, (216) 678-3589.
YEAR PUBLISHED		
COST OF KIT		$15 manual, $25 templates.
COST PER CHILD/COST OF FORMS		$.25 per child
AGE RANGE		1 -12 months
DOMAINS	COGNITIVE	
	EXP. LANG.	
	RECPT. LANG.	
	ARTIC.	
	GROSS MOT.	
	FINE MOT.	
	PSYCHOSOC.	
	SELF-HELP	
	ADAPTIVE	
	OTHER	
STANDARDIZATION		Restandardized 1990. 706 healthy infants, parents were 70% H.S. grads and above.
VALIDITY		Cronbach's alpha = .95 - .99. Test-retest (+69 days) = .91 - .93. Inter-rater = .71 - .95. When factor analyzed, broke into age factors concurrent w/BSID = .84. Predictive = coeff. are .32 after 3 to 4 years. For high-risk kids the KID correlates .75 w/Bayley at 9 mo.
RELIABILITY		Predicts handicapped kids about .97.

SENSITIVITY	94 to 97% correct assignment (combined).
SPECIFICITY	
TIME TO ADMINISTER	30 - 40 minutes
WHO CAN ADMINISTER	Self administered by parents.
ROLE OF FAMILY	Parent measure.
ITEMS PASSED BY	Parent report.
ITEM SCORING	Yes/No
RESULTS	
ADAPTATION OF SPECIAL NEEDS	No information given.
SENSITIVITY TO OTHER CULTURES	Spanish version available.
MATERIALS AND EASE OF USE	Easy to use.
TRAINING	None required.
COMMENTS	252 items. Computer scoring available. Good psychometric properties except for lack of representation of nonwhite culture/race.

INSTRUMENT		**MILLER ASSESSMENT FOR PRESCHOOLERS**
PUBLISHER		Psychological Corp. Order Service, P. O. Box 839954, San Antonio, TX 78283-3954, 800-228-0752
YEAR PUBLISHED		1982
COST OF KIT		$400
COST PER CHILD/COST OF FORMS		$1.86
AGE RANGE		2-9 to 5-8
DOMAINS	COGNITIVE	Nonverbal, Complex Tasks
	EXP. LANG.	Verbal Scale
	RECPT. LANG.	Verbal Scale
	ARTIC.	
	GROSS MOT.	Foundations and Coordination
	FINE MOT.	Foundations and Coordination
	PSYCHOSOC.	
	SELF-HELP	
	ADAPTIVE	
	OTHER	
STANDARDIZATION		1200, stratified by age, race, sex, community size and SES.
VALIDITY		Predictive: Normal versus delayed children correctly identified 80 to 90% in 3 studies.
RELIABILITY		Test-retest: .80 Inter-rater: .98

SENSITIVITY	Not given.
SPECIFICITY	Not given.
TIME TO ADMINISTER	25 - 45 minutes
WHO CAN ADMINISTER	Paraprofessionals and professionals.
ROLE OF FAMILY	Parents observe. Children can sit in a parent's lap.
ITEMS PASSED BY	Observation only.
ITEM SCORING	Percentile on each item.
RESULTS	Scale percentiles, total scores and 5 indexes.
ADAPTATION OF SPECIAL NEEDS	Manual from MAP workshop describes how to adapt for special needs.
SENSITIVITY TO OTHER CULTURES	BUROS handbook states it is one of the most culture-free tests because most items are neurologically-based. Item bias analysis was done.
MATERIALS AND EASE OF USE	Very easy to use and score. Well organized.
TRAINING	For use as a screening tool, there is a training videotape. When used as an evaluation tool, there are workshops.
COMMENTS	Children enjoy the test. Excellent psychometric properties. Can be a screen or an evaluation tool.

INSTRUMENT		**MINNESOTA CHILD DEVELOPMENT INVENTORY**
PUBLISHER		Behavior Science Systems, Box 1108, Minneapolis, MN 55458 (612) 929-6220
YEAR PUBLISHED		1972
COST OF KIT		$60.00
COST PER CHILD/COST OF FORMS		$.50/child
AGE RANGE		1 - 6 years
DOMAINS	COGNITIVE	X comprehension-conceptual situation comprehension
	EXP. LANG.	X
	RECPT. LANG.	
	ARTIC.	
	GROSS MOT.	X
	FINE MOT.	X
	PSYCHOSOC.	
	SELF-HELP	X
	ADAPTIVE	
	OTHER	personal-social, comprehension-conceptual situation comprehension
STANDARDIZATION		796 white children 6 mo. - 6 1/2 yrs. Norms by age and sex - fairly well - educated sample. Mother's age = 31, suburban.
VALIDITY		Highly age discriminating. Correlation between MCDI at 30 mo. and WISC-R at 60+ mo. = .53.
RELIABILITY		For Gen. Devel. Scale reliability coefficients are .80 to .90.

SENSITIVITY	
SPECIFICITY	
TIME TO ADMINISTER	30 - 50 minutes
WHO CAN ADMINISTER	Self administered by parent.
ROLE OF FAMILY	Entirely parent information.
ITEMS PASSED BY	Parent report.
ITEM SCORING	Yes/No
RESULTS	Age norms w/20% and 30% delay levels by age.
ADAPTATION OF SPECIAL NEEDS	None
SENSITIVITY TO OTHER CULTURES	Spanish version - but it's a direct translation.
MATERIALS AND EASE OF USE	Easy to use. Little professional time required.
TRAINING	None required.
COMMENTS	Booklet, answer sheet and profile. 320 statements. Scoring templates available. Purpose is to screen children not necessarily suspected of problems. A community screen. Standardized on only Caucasian children. Consider how much time this can take parents. Also, what about parents who read poorly or speak another language?

INSTRUMENT		**PRESCHOOL DEVELOPMENT INVENTORY**
PUBLISHER		Behavior Science Systems, Box 1108, Minneapolis, MN 55458 (612) 929-6220
YEAR PUBLISHED		1988
COST OF KIT		$5.00 manual
COST PER CHILD/COST OF FORMS		$.28 per child
AGE RANGE		3 - 6 yrs.
DOMAINS	COGNITIVE	
	EXP. LANG.	
	RECPT. LANG.	
	ARTIC.	
	GROSS MOT.	
	FINE MOT.	
	PSYCHOSOC.	
	SELF-HELP	
	ADAPTIVE	
	OTHER	General Development Inventory, Possible Problems
STANDARDIZATION		Abbreviated form of the MCDI.
VALIDITY		See MCDI.
RELIABILITY		See MCDI.

SENSITIVITY	
SPECIFICITY	
TIME TO ADMINISTER	10 - 20 minutes
WHO CAN ADMINISTER	Anyone. Self administered by parents.
ROLE OF FAMILY	Parent measure.
ITEMS PASSED BY	Parent report.
ITEM SCORING	Yes/No
RESULTS	Below age expectations = lower than the average score for children 25% younger. Identifies 5% of children screened.
ADAPTATION OF SPECIAL NEEDS	None.
SENSITIVITY TO OTHER CULTURES	No information available.
MATERIALS AND EASE OF USE	Very easy to use. Can be mailed out.
TRAINING	None required.
COMMENTS	Can be mailed out, 1 page, 84 questions. First stage screen. Very quick and easy. Can be mailed to parents and mailed back.